

NEW CLAIMS

ART 34 AMDT

1. (Amended) A nickel-tantalum alloy sputtering target for gate electrode material containing 0.5 to 10at% of tantalum and residual nickel.
2. (Amended) A nickel-tantalum alloy sputtering target for gate electrode material containing 1 to 5at% of tantalum and residual nickel.
3. (Amended) A nickel-tantalum alloy sputtering target according to claim 1 or claim 2, wherein inevitable impurities excluding gas components are 100wtppm or less.
4. (Amended) A nickel-tantalum alloy sputtering target according to claim 1 or claim 2, wherein inevitable impurities excluding gas components are 10wtppm or less.
5. (Amended) A nickel-tantalum alloy sputtering target according to any one of claims 1 to 4, wherein oxygen is 50wtppm or less, and nitrogen, hydrogen and carbon are respectively 10wtppm or less.
6. (Amended) A nickel-tantalum alloy sputtering target according to any one of claims 1 to 5, wherein oxygen is 10wtppm or less.
7. (Amended) A nickel-tantalum alloy sputtering target according to any one of claims 1 to 6, wherein the initial magnetic permeability of in-plane direction of the target is 50 or more.
8. (Amended) A nickel-tantalum alloy sputtering target according to any one of claims 1 to 7, wherein the maximum magnetic permeability on the initial magnetization curve of the in-plane direction of the target is 100 or more.
9. (Amended) A nickel-tantalum alloy sputtering target according to any one of claims 1 to 8, wherein the average crystal grain size of the target is 80 μ m or less.
10. (Amended) A manufacturing method of a nickel-tantalum alloy sputtering target according to any one of claims 1 to 9, wherein final heat treatment is performed at a recrystallization temperature of up to 950°C.